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A NEW OPPORTUNITY FOR PARENT PARTICIPATION IN EDUCATION, REPORT NUMBER 1--RESEARCH ON THE CONTEXT OF INSTRUCTIONAL TELEVISION.

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A NUMBER OF STUDIES RELATING TO WAYS IN WHICH INSTRUCTIONAL TELEVISION CAN BEST FIT INTO THE TOTAL TEACHING SITUATION HAVE BEEN CONDUCTED JOINTLY BY THE DENVER PUBLIC SCHOOLS AND STANFORD UNIVERSITY'S INSTITUTE FOR COMMUNICATION RESEARCH. AN ATTEMPT WAS MADE IN THIS STUDY TO LEARN WHETHER DIRECT PARENT PARTICIPATION IN EDUCATIONAL TELEVISION LESSONS CAN INCREASE THEIR CHILDREN'S LEARNING. THE ACTIVITIES ON THE PART OF THE PARENTS WERE--(1) TO WATCH A 15-MINUTE TELEVISED SPANISH LESSON IN THE EVENING WITH THEIR CHILD (THE CHILD HAD ALSO SEEN THE PROGRAM IN CLASS), (2) TO FOLLOW A SPECIAL INSTRUCTION GUIDE INVOLVING THE USE OF A PHONOGRAPH RECORD, AND (3) TO PREPARE A DATA SHEET INDICATING PROGRAMS WATCHED AND AMOUNT OF TIME SPENT PRACTICING WITH THEIR CHILD. THE PTA COORDINATED THE WORK WITH PARENTS. THE PARENTS WHO VOLUNTEERED TO BECOME INVOLVED IN THE PROJECT WERE NOT TYPICAL OF THE TOTAL PARENT POPULATION IN DENVER. THEY TENDED TO BE IN HIGHER STATUS OCCUPATIONAL GROUPS, AND THEIR CHILDREN'S ACADEMIC CHARACTERISTICS WERE RELATIVELY HIGH. THE RESULTS OF A 50-QUESTION ACHIEVEMENT TEST, AFTER ADJUSTMENT FOR DIFFERENCES IN LEARNING POTENTIAL, DEMONSTRATED THAT PARENT HELP SIGNIFICANTLY INCREASED LEARNING. RECOMMENDATIONS WERE THAT THIS NEW OPPORTUNITY FOR DIRECT PARENT PARTICIPATION IN EDUCATION BE EXTENSIVELY INVESTIGATED. FURTHER REPORTS ARE LISTED UNDER ACCESSION NUMBERS ED 003 245 AND ED 003 246. (JC)

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RESEARCH ON THE CONTEXT OF INSTRUCTIONAL TELEVISION

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A NEW OPPORTUNITY FOR PARENT PARTICIPATION IN EDUCATION

by

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The Denver Public Schools and Stanford University's Institute for Communication Research are currently engaged in a joint research project on the context of instructional television. The purpose of the project is to learn how instructional television can best fit into the total teaching situation. A substantial amount of research has established that television is a very effective teaching medium. Ways of combining it with other educational activities must now be considered, and the Denver-Stanford project is a beginning effort in this direction. Kenneth E. Oberholtzer is principal investigator for the Denver Public Schools and Wilbur Schramm is principal investigator for Stanford University. This is one of a number of project progress reports.

Open circuit television, used as a teaching device in schools, offers parents a new and unique opportunity to become directly involved in their children's education. Anyone with a television set can receive in his home exactly the same instruction which is given in the classroom; this has not been possible with the more conventional teaching practices.

The fact that televised instruction can be received in the home makes it possible for parents to cooperate more actively in their children's learning. Such parent aid, if it should prove to increase the

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achievement of boys and girls significantly, would be a relatively simple method of improving American education.

As the Denver-Stanford project was being planned, the possibility of inviting parents to participate in a new supplementary teaching role received considerable attention. However, several experienced educators expressed doubts that many parents would be willing to cooperate. They also indicated that, regardless of any apparent potential, the whole idea was impractical. The final decision was to discuss the project with Denver PTA officials, sound out their opinion on parent involvement, and to study this new potential aid to learning if (and only if) they felt it was workable.

Other decisions were to concentrate on teaching one subject during the project and to limit the research to elementary level instruction, using fifth graders the first year. Spanish was selected because it seemed to lend itself well to television, because it is a field so recently added to the elementary school curriculum, and because of the acute shortage of trained classroom teachers.

SECURING PARENT PARTICIPANTS

A grant under Title VII of the National Defense Education Act was received in January of 1960, and organization of the project began immediately. New PTA officers were elected in March, and they were approached the first week in April about parent participation in the project. Present at that first meeting were the Superintendent of the Denver Public Schools, the Deputy Superintendent for Instruction, the new Denver County PTA President, and the new PTA First Vice-President.

The PTA President and Vice-President were enthusiastic about the possibilities of such a study, and they presented the parent involvement proposal

to their executive committee. This group voted unanimously to proceed and indicated that enough parents would cooperate to make the research valid. They also agreed that the PTA organization would assist in the planning, and that they would handle all administrative details of the project related directly to parents:

(1) informing parents of the project and its needs

(2) recruiting

(3) distributing materials related to the project

(4) collecting any information needed from participants

(5) motivating participants periodically to follow their assigned procedures.

Thus the PTA assumed the task of working closely with parents scattered throughout a large city (population 500,000). The first step in accomplishing this was the organization of a central steering committee, which was to determine and implement specific procedures. This committee, which will function for the duration of the project, is composed of eight elementary school PTA presidents, eight elementary school principals (one from each high school area), the Superintendent, the Deputy Superintendent for Instruction, the Director of Radio and Television Activities, the Administrative Director of Instruction for Elementary Schools, the PTA Vice-President for Television, the PTA Vice-President for Parent Education, the PTA Television Chairman, the PTA Parent Education Chairman, and the Project Directors for Stanford and the Denver Schools.

The steering committee first presented the parent participation proposal to a meeting of elementary school principals and PTA presidents. Considerable detail was given at this meeting so that all concerned would know exactly what was involved. The principals and PTA Presidents were

then asked to indicate if they thought their parents would be interested in participating, and 19 gave an affirmative answer. Since this assured considerably more than the 300 families considered a minimum for research purposes, the central steering committee decided to proceed.

A steering committee for each school was established to work directly with individual parents. Included in each local school committee was the principal, the PTA president, the PTA 1st vice-president, the PTA parent education chairman, the PTA television chairman, a teacher, and a parent.

The local committees then met with all prospective parent participants from their schools. The project was explained in detail so that parents would understand exactly what was expected of them if they should agree to participate. After discussion, a vote was taken to determine if the school should be included in this phase of the project.

The individual steering committees reported back to the central steering committee, and the result far exceeded expectations. Three hundred families had been set as the minimum number needed for the project, with 600 a desirable but unexpected number. Thirty-six classes in 28 schools actually volunteered giving 1240 sets of parents. This excellent response allowed some expansion of project aims since considerable latitude was available to compensate for those who might not actually follow through.

This completed the first stage of the project. The next task was to determine exactly what parents should do and to plan how the PTA, in light of research aims, should administer parent activities.

PLANNING PROCEDURES AND PREPARING MATERIALS

Determining exactly what parents should do was not easy. Television is a new teaching medium, and no precedent for the type of activity planned

was available. The parental activities selected, then, would necessarily represent only a first effort. Securing the comments of those involved plus their ideas for improvement would be quite important.

All students in the project were to see a 15 minute television lesson on Monday, Wednesday, and Friday as a regular part of the school curriculum. Other learning activities, including parent help, were to revolve around this in-school television experience.

The first activity established for parents was to watch the television lesson in the evening with their child. Since the child would also see the lesson in the classroom, this meant that these students would get a double exposure, which should prove valuable. Seeing a filmed lesson twice increases learning substantially over seeing it once (1), and television should give similar results. Furthermore, the television lesson would give parents a basis on which to build their other activities.

A special instruction guide was prepared for parents. The guide listed all program content, gave instructions for teaching this content, and suggested ways that appropriate Spanish words and phrases might be incorporated into regular home activities. A special 33 1/3 rpm phonograph record was also prepared for use by parents with their children. On this record, each Spanish phrase from the program was given. A pause followed during which the family could repeat the words aloud, and the phrase was given again so that listeners could verify their pronunciation.

Finally, a data sheet in the form of a calendar (Appendix A) was prepared so that parents could indicate the actual programs they watched, specify the amount of time spent practicing with their child, and give comments or suggestions based on their experience.

The PTA's next job was to instruct parents on their procedures through the local steering committees and to distribute materials. The central

steering committee decided that a pamphlet describing the necessary procedures to be followed would be helpful, and this pamphlet (Appendix B) was developed at a summer television workshop which three PTA officers attended.

A football theme was adopted since Spanish would begin during the fall semester. Research was described in terms of a carefully played game in which the rules must be followed exactly to achieve a favorable outcome. The end result, since it was prepared by the PTA for its local officers, was well tailored to its audience; at the same time, it contained all information vital to the research.

Each elementary principal received a copy of the pamphlet at the Elementary Principals' Meeting in August, and PTA presidents were given a copy the first week in September. At a final meeting of all elementary school PTA officers, the pamphlet and the project needs enumerated in it were discussed.

Teaching materials were delivered to the schools involved, and each local steering committee planned its own course of action. Local meetings were held with the participating fifth grade parents the week before television instruction began, and materials were delivered at that time. Research personnel participated in many of these meetings at the request of the local steering committees. All meetings, however, were planned entirely by the PTA and were conducted by PTA officers.

All direct contact with parents during the semester was handled by the local steering committees. The central steering committee met monthly to hear reports from the local groups, to discuss project needs with research personnel, and to determine what guidance the parents needed. The

individual steering committees, however, were encouraged to meet the needs of the project in the manner most effective in light of their own varied situations.

RESULTS OF PARENT PARTICIPATION IN TERMS OF STUDENT PERFORMANCE

The primary question to be answered about the parent participation phase of the project was, "Did parent help significantly increase the student's learning?" This is answered in terms of student performance on an achievement test covering the instruction area.

The type of learning activity in which each research group was active is indicated in Table 1. As mentioned before, film research suggests that seeing the television lesson twice should significantly increase learning. This is precisely what group two results show ($P<.001$) and this performance relates the applicability of these findings to instructional television. The parent participant group (group six) also saw each television lesson twice. The difference in performance between groups two and six, therefore, is the result of parent help since these two groups received similar instruction otherwise.

Table 1 gives a comparison of group averages (means) on the achievement test. The test consisted of 50 questions and was administered via television. Results in Table 1 are based on a random sample of 1,764 pupils.

Table 1

GROUP AVERAGES OF FIFTH GRADE SPANISH STUDENTS
ON A 50 QUESTION ACHIEVEMENT TEST

Research Group	(1) No Additional Practice	(2) Evening Viewing	In-school Television Plus (3) Dialogue Classroom Practice	(4) Structured Classroom Practice	(5) Eclectic Classroom Practice	(6) Evening Viewing Plus Parent Help
Average Score	26.91	29.45	33.50	33.52	33.91	32.34
N	(294)	(294)	(294)	(294)	(294)	(294)

Dialogue practice pupils, with the lowest score of the classroom groups, performed better than parent help pupils at the .048 level (two-tailed significance test). The superior scores of classroom instruction groups were expected since professional educators worked with these pupils. Of particular interest, however, is the relatively high performance of the parent participant group (group six). Pupils in this group answered an average of 2.9 more items correctly than did group two, and this 5.8 percent difference in performance ($P<.001$) reflects the value of parent help since these groups were otherwise alike.

It will be remembered that students in group six were academically more capable than those in group two and therefore should do better even if learning conditions were similar. Such differences are not reflected in Table 1, however. The averages in Table 1 have been adjusted to compensate for differences in academic ability by the statistical technique of covariance analysis. Thus, the 5.8 percent better performance of group six students is strictly the result of parent help.

Direct parent participation in education thus appears to show great promise. The parents involved in this project obviously did a considerable amount of work with their children, contrary to predictions of several

experienced educators, and their work resulted in significantly increased learning. The study of parental cooperation is being continued.

TYPE OF PARENT WHO PARTICIPATED

An important question is, "What type of parent will work with his child?" Would all parents be willing to cooperate if they knew their involvement would significantly increase their child's learning? If not, what factors would be related to participation? Results of the first semester's work in Denver offer some tentative answers.

A comparison of occupation is possible, for example. [Occupation is widely recognized as the best single indicator of socio-economic status (2).] At the beginning of the first semester of the project, the fifth grade students involved were asked to indicate the occupation of the head of their household. Parents were then classified according to the scale used by the Institute for Communication Research.

Every fifth grade student in the Denver Public Schools was required to take either Spanish or French. About 6500, or 81 percent, chose Spanish. As indicated before, the parents of 1240 of these were in the parent participant group. It should be noted that only the parent participant group consisted of volunteers. The remaining 5260 were divided randomly into five other groups, each of which viewed the television lesson in the classroom and four of which engaged in some other activity. Table 2, then, is a comparison of the parent volunteers with parents of the total remaining fifth grade Spanish pupils. (The first five groups are indentified in Table 1.)

Table 2

OCCUPATIONAL CATEGORY OF PARENTS
OF FIFTH GRADE SPANISH STUDENTS

Percent of Groups in Each Category

Occupation	Other Groups Combined	Parent Participant Group
Unemployed	4.09%	3.08%
Service	5.79	3.08
Unskilled worker	17.15	6.85
Semi-skilled worker	21.80	20.54
Skilled worker	19.55	17.12
Clerical or sales	15.22	25.00
Proprietor or managerial	5.72	8.90
Professional or Technical	9.84	15.07
Retired and other	1.52	0.34
	100.00%	100.00%
Lower Three Categories	27.03%	13.01%
Upper Three Categories	30.78	48.97
N	(1470)	(294)

This table indicates that parents who volunteered to participate in the project tended to be from the higher status occupations. Almost half of them were from the upper three categories; whereas, the other groups combined had less than one-third here.

A different approach is used in Table 3; here the comparison is between characteristics of the students. This is indirect as far as parents

are concerned, of course, but it is of interest insofar as student performance reflects certain parental attitudes and values.

Group averages (means) are shown for these six characteristics: IQ, grade point average, and Stanford Achievement Test scores for paragraph meaning, word meaning, spelling, and language (English). Grade point average is on a four point base (four points for each A, three points for each B, etc). The Stanford scores are in terms of grade placement.

Table 3

GROUP AVERAGES OF FIFTH GRADE SPANISH STUDENTS
ON SELECTED CHARACTERISTICS

Characteristic	Other Groups Combined	Parent Participant Group
IQ	99.94	100.93
Grade Point Average	2.59	2.66
Paragraph Meaning*	5.19	5.49
Word Meaning*	5.25	5.43
Spelling*	5.06	5.16
Language*	5.36	5.75
N	(1470)	(294)

*Stanford Achievement Tests were given during October of the fifth grade.

Students in the parent participant groups, then, had average scores well above the combined scores of all other students in every characteristic.

For this study, at least, the parents who volunteered to become directly involved in a portion of their children's education were not typical of the total parent population in Denver. They tended to be in the higher

status occupational groups, and their children's relatively high standing in six characteristics indicates a prior favorable attitude toward education.

This is not unexpected, of course, and any other result would have been surprising. It does emphasize, however, a problem certain to be encountered if this new form of parent aid should prove of major significance and be widely adopted. Such help would necessarily be voluntary on the parent's part, and those from the lower socio-economic levels would be less cooperative. Their children, who are likely to need help most, would be helped least.

This, of course, does not negate the value of using parental cooperation. It indicates that some means of motivating <u>all</u> parents to cooperate would be highly desirable.

SUMMARY AND CONCLUSIONS

When open circuit educational television is used as a teaching device, it can be received in the home as well as in the classroom, and parents using this instruction can become directly involved in the education of their children in a new way. If such parent aid should significantly increase the child's learning, a new method of improving the quality of American education would be available.

The Denver Public Schools and the Institute for Communication Research at Stanford University began a joint research project on the context of instructional television in January of 1960. The object of this project is to learn how educational television can be combined with other activities to produce maximum learning. Direct parent participation was included as one activity to be investigated.

Problems related to parent involvement included: securing a sufficient number of parent volunteers, instructing these participants on procedures to be followed, delivering materials to them, and motivating them to continue cooperating throughout the project.

The Denver County PTA was invited to assist in the project and agreed to handle all administrative aspects of the project related directly to parents. A great amount of planning and work was necessary to meet these commitments, and the rather remarkable results attest to the PTA's thoroughness and efficiency. This phase of the Denver-Stanford project suggests a new and positive role which PTA groups across the country might assume.

The results of a 50 question achievement test, after adjustment for differences in learning potential, demonstrate clearly that parent help significantly increased learning. This type of activity, therefore, seems to show great promise as an educational method.

Comparisons of socio-economic level of parents and academic achievement of students show that volunteers for parent participation were above average, and that they were from that portion of the total population which tends to place high value on education. This not unexpected result indicates that, for direct parent participation to raise the quality of education uniformly, some way must be found to motivate all types of parents to cooperate.

Study of this technique of parental cooperation is continuing and should be repeated in other areas. In Denver one of the next steps will be to combine parent help with classroom practice. Results of the first phase of the project, however, indicate without qualification that this new opportunity for direct parent participation in education deserves extensive investigation.

APPENDIX A

PARENTS' RECORD FORM

Please indicate the total amount of time you spend practicing Spanish each week on the blank lines shown at the end of each week.

Do not include the time spent watching the television lesson.

	Monday	Tuesday	Wednesday	Thursday	Friday
September	19	20	21	22	23
	26	27	28	29	30
October	3	4	5	6	7
	10	11	12	13	14
	17	18	19	20	21
	24	25	26	27	28
	31				
November		1	2	3	4
	7	8	9	10	11
	14	15	16	17	18
	21	22	23	24	25
	28	29	30		
December				1	2
	5	6	7	8	9
	12	13	14	15	16
	19	20	21	22	
January		3	4	5	6
	9	10	11	12	13
	16	17	18	19	20
	23	24	25	26	

PUPIL'S NAME _____

SCHOOL _____

ADDRESS _____

PARENTS: Please sign and give your comments regarding the program and the procedures you have followed in [redacted]. the space below.

SIGNATURE _____

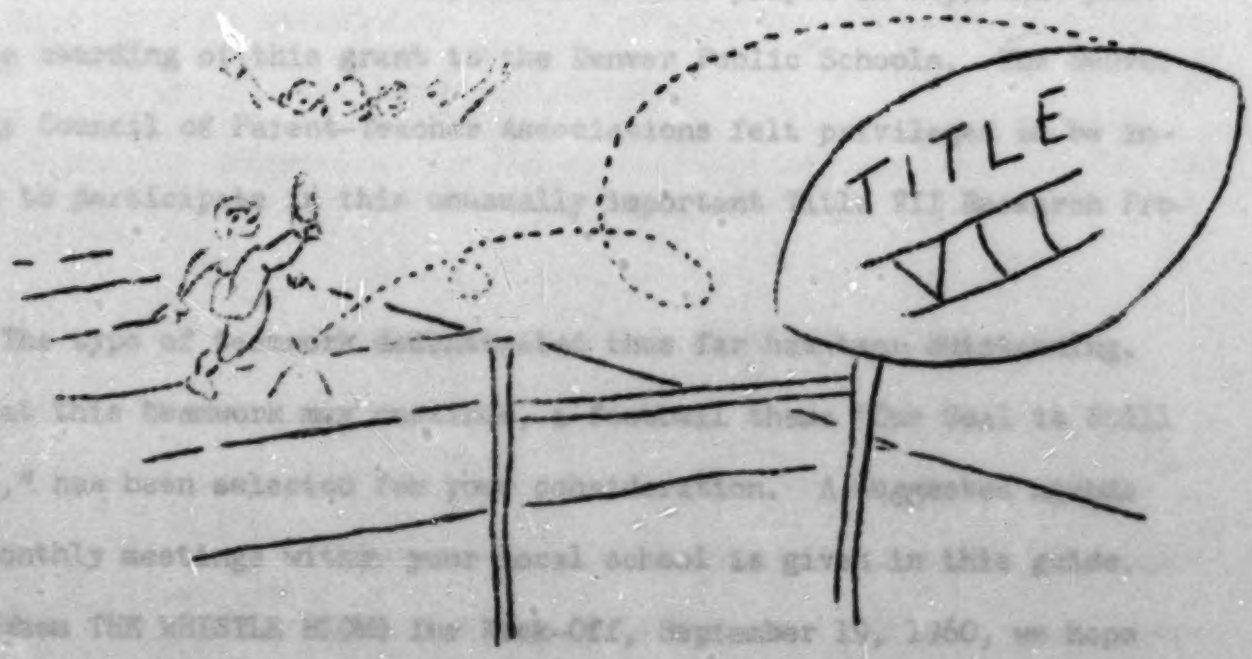
APPENDIX B

THE PTA
OPERATIONAL OUTLINE PAMPHLET

SUGGESTED OPERATIONAL OUTLINE FOR ELEMENTARY STEERING COMMITTEES

TITLE VII RESEARCH PROJECT

THEME: OUR GOAL IS STILL AHEAD



A Message from the President of Denver County Council of P.T.A.

Mrs. Keith Miller

SURVEY THE FIELD

The Denver Post predicted on November 18, 1956, that "Educational television will make a unique and important impact on our educational future." Since that prediction, much has been accomplished in Denver in the teaching of various courses over television.

In language, for example, a committee of two teachers and two P.T.A. representatives developed "Poco a Poco", the first Spanish series on KRMA T.V., at the Television Workshop. The television foreign language program has continued to grow "Poco a Poco" (meaning little by little).

A high point has now been reached. The Denver Public Schools and Stanford University received a grant of approximately $300,000 under the National Defense Education Act for research to determine the most effective methods of using instructional television. In this research project

Spanish will be taught to fifth and sixth grade pupils.

Because home as well as school activities will be studied, the co-operation of the local Parent-Teacher Associations in other educational projects and their work on curriculum studies played an important part in the awarding of this grant to the Denver Public Schools. The Denver County Council of Parent-Teacher Associations felt privileged to be invited to participate in this unusually important Title VII Research Project.

The type of teamwork demonstrated thus far has been outstanding. So that this teamwork may continue, a football theme "Our Goal is Still Ahead," has been selected for your consideration. A suggested agenda for monthly meetings within your local school is given in this guide.

When THE WHISTLE BLOWS for Kick-Off, September 19, 1960, we hope that all preparations will have been made. The in-school Spanish language lessons for the fifth graders will be telecast on Mondays, Wednesdays and Fridays during the first 15 minutes of the afternoon schedule, which begins at 12:45 p.m. (Rules of the game on page 20 under D)

PRE-GAME WARM-UP

The purpose of this guide is to help local units outline a prescribed procedure to achieve the best possible cooperation in the various research patterns. Such cooperation is needed to determine the most effective methods of using instructional television. The results will be publicized nationally.

In addition to these basic purposes, the outline should be of value in helping local units to achieve the following purposes.

A. To stimulate and maintain a high level of parent interest in

this project

B. To provide for parents whose children are participating in the project facilities for communicating any reactions they may have regarding their experiences in this program via the personal telephone contact system that may be established

C. To provide information for new parents and new teachers entering the project

TEAM ORGANIZATION AND RESPONSIBILITIES

A. Set up local school steering committees

Suggested members: Principal, Spanish teacher, President, Vice-President, Parent-Education Chairman, TV Chairman, fifth grade parents (3 in each group wherever possible or practical) (Suggest monthly meetings be held, one-half hour before Board of Managers meeting, if feasible.)

B. Introduce the Coaches (Principal, President)

President: Appoint recorder of local school steering committee

Preside at meetings

Act as liaison

Recorder: Keep minutes and other necessary records

C. Make Team Assignments

Assign a certain number of parents to members of local school steering committees. (Fifth grade parents are preferable.) Some schools will have more groups than others, in which case, it is suggested local school steering committees work out a plan best suited to their needs.

D. Observe the Rules of the Game

Research Item I. In-school viewing - no practice, no evening viewing

Research Item II. In-school viewing - evening viewing - no in-school practice

Research Item III. In-school viewing - dialogue practice in classroom - no evening viewing

Research Item IV. In- school viewing - structured practice in classroom - no evening viewing

Research Item V. In-school viewing - eclectic practice (combination of methods) in classroom - no evening viewing

Research Item VI. In-school viewing - no in-school practice - evening viewing including parents - Spanish practice with parents using established procedures

SUGGESTED AGENDA FOR MONTHLY MEETINGS

SEPTEMBER

(Before September 19, 1960-when project starts)

KICK-OFF (Local steering committee meeting with parents)

A. Put team on the field

Local steering committee should meet before parent meeting relating to agenda.

Meeting of local school steering committee with all fifth grade parents, to explain Title VII Research Project

B. Give rules for team

Parent participation in project according to the Research Pattern

C. Explain duties of the Bench

Importance of following instructions

OCTOBER

Conferences with the Coaches (Principal, President)

Local School Steering Committee Meeting

A. Report on progress to date

1. Principal

2. Parent

3. Teacher

B. Encourage good sportsmanship

1. Rules observed

2. Play-by-play (questions-suggestions)

NOVEMBER

Half-Time (Local school steering committee and parents participating in Research Item VI)

A. Evaluate program

B. Have members on team (administrative personnel) report

DECEMBER

Time Out!

No meeting this month, but continue lesson participation!

JANUARY

Chalk Up the Scoreboard (Local school steering committee meeting)

A. Notify the participating parents regarding next semester

B. Give plans for second semester

POST-GAME REVIEW

The above suggested outline is intended merely as a guide for principals and presidents. Each school may have need for some variation in their meeting plans. Monthly meetings should be a part of each school's plans.

To maintain contact, a FORWARD PASS, in the form of a bulletin, might be sent by mail to inform parents of changes or suggestions between parent meeting dates.

Whenever possible, this action program should be combined with regularly planned meetings such as Board of Mangers, teas, coffees, study groups, etc.

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